

Place-Based Predictive Policing: Policing's Holy Grail or Pandora's Box?

The Role Culture, Technology and Community Expectations play in
Policing's Understanding and Use of Predictive Algorithms

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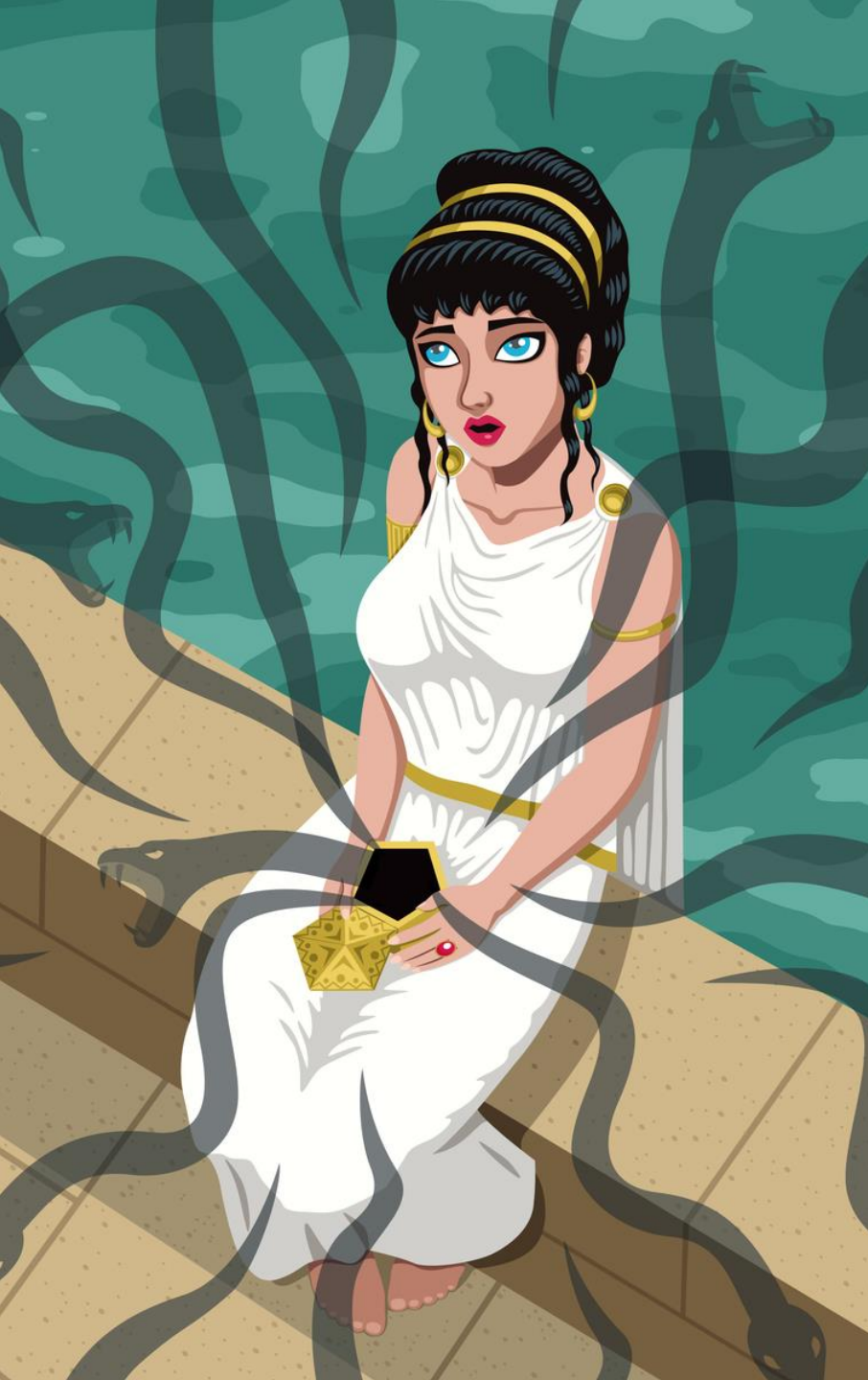
Workshop on Law Enforcement Use of
Predictive Policing Approaches



Are predictive algorithms the Holy Grail of Policing?

– How the police see predictive strategies –

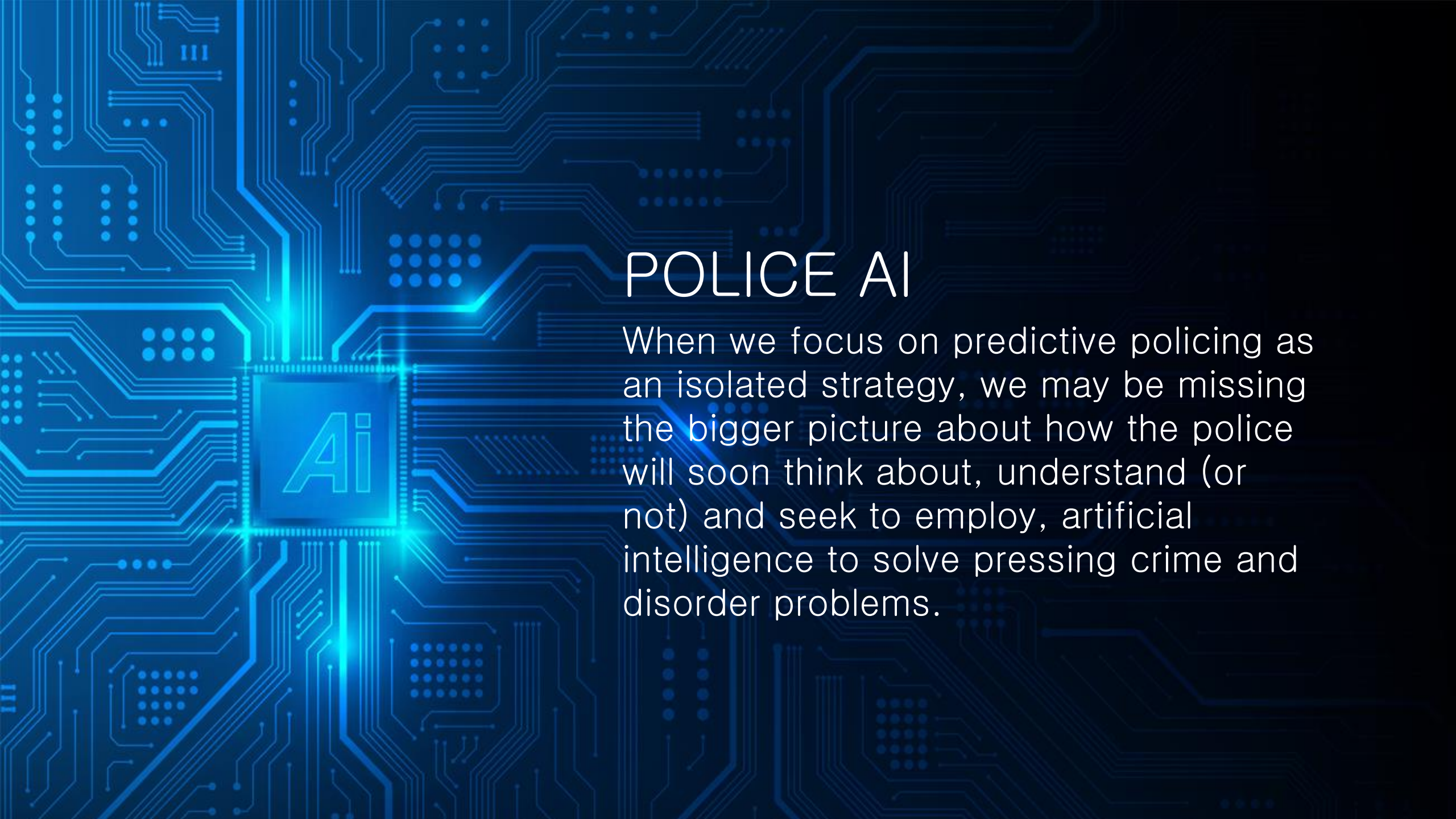
- The promise of reducing or preventing crime – makes communities safer by stopping crime before it occurs
- Fulfills the mandate many people have for policing (“catch the bad guys– keep us safe”)
- Helps mitigate the impact of the on-going recruiting/hiring crisis in policing
- Makes policing more efficient/helps control costs (do more with less)
- Might increase trust and confidence some people have in policing



Or is predictive policing really Pandora's Box?

– How others see predictive strategies –

- Can exacerbate bias in policing
- Can further “wrongful conviction/arrest/detention
- Can damage community perceptions of the police
- Strengthens belief that policing is biased
- Ultimately, might remove the human element from many aspects of police/crime fighting decision making
- Will it bring about “great troubles and misfortunes,” but also hold hope for the future?



POLICE AI

When we focus on predictive policing as an isolated strategy, we may be missing the bigger picture about how the police will soon think about, understand (or not) and seek to employ, artificial intelligence to solve pressing crime and disorder problems.



THE COMING AI TSUNAMI

Is there a more potentially disruptive technology facing us today?

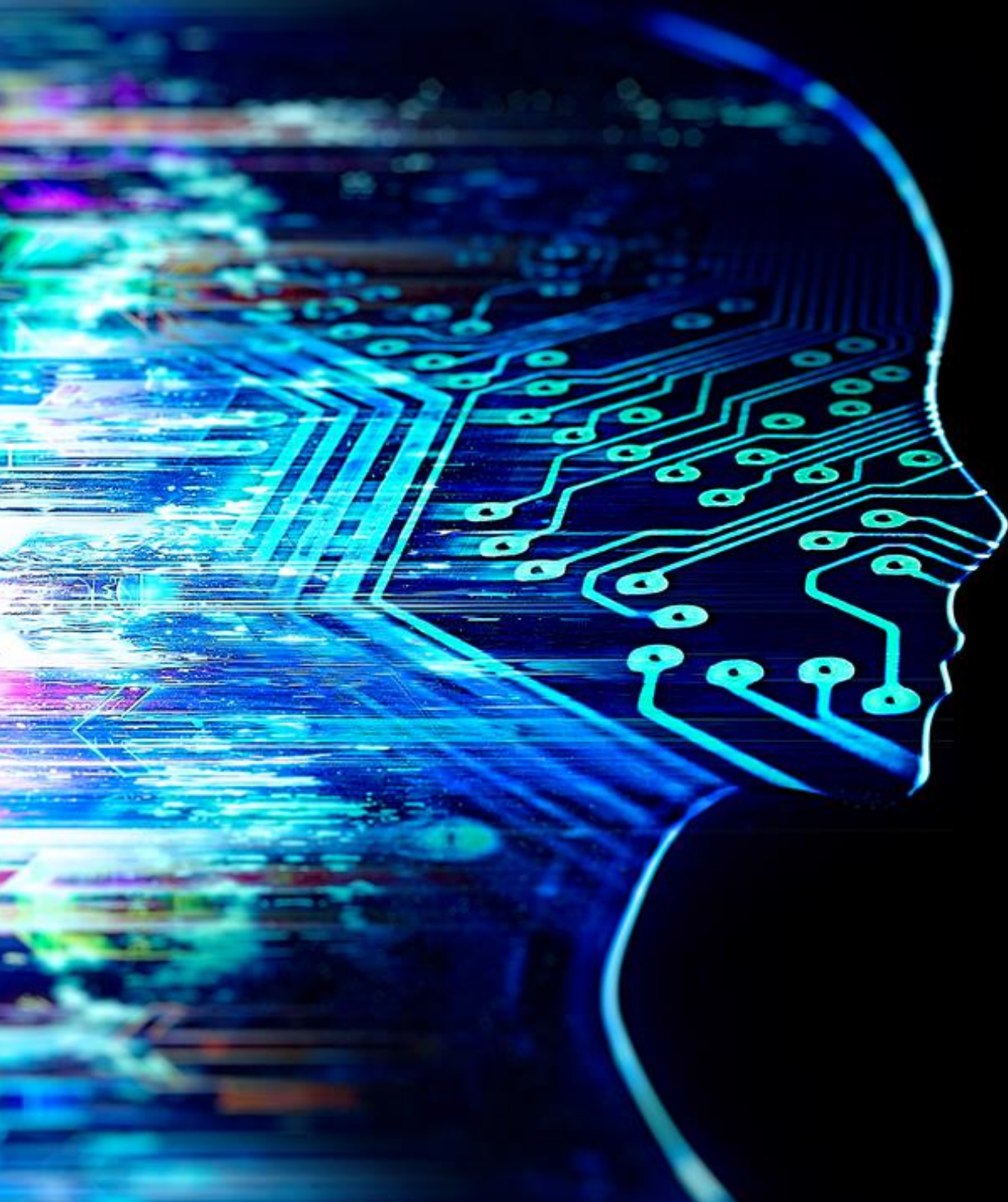
Will the current AI race between the megatech companies end soon?

Will AI's integration into every aspect of our lives slow down?

Will the challenges police leaders face relative to crime control, staffing, community trust and confidence abate?

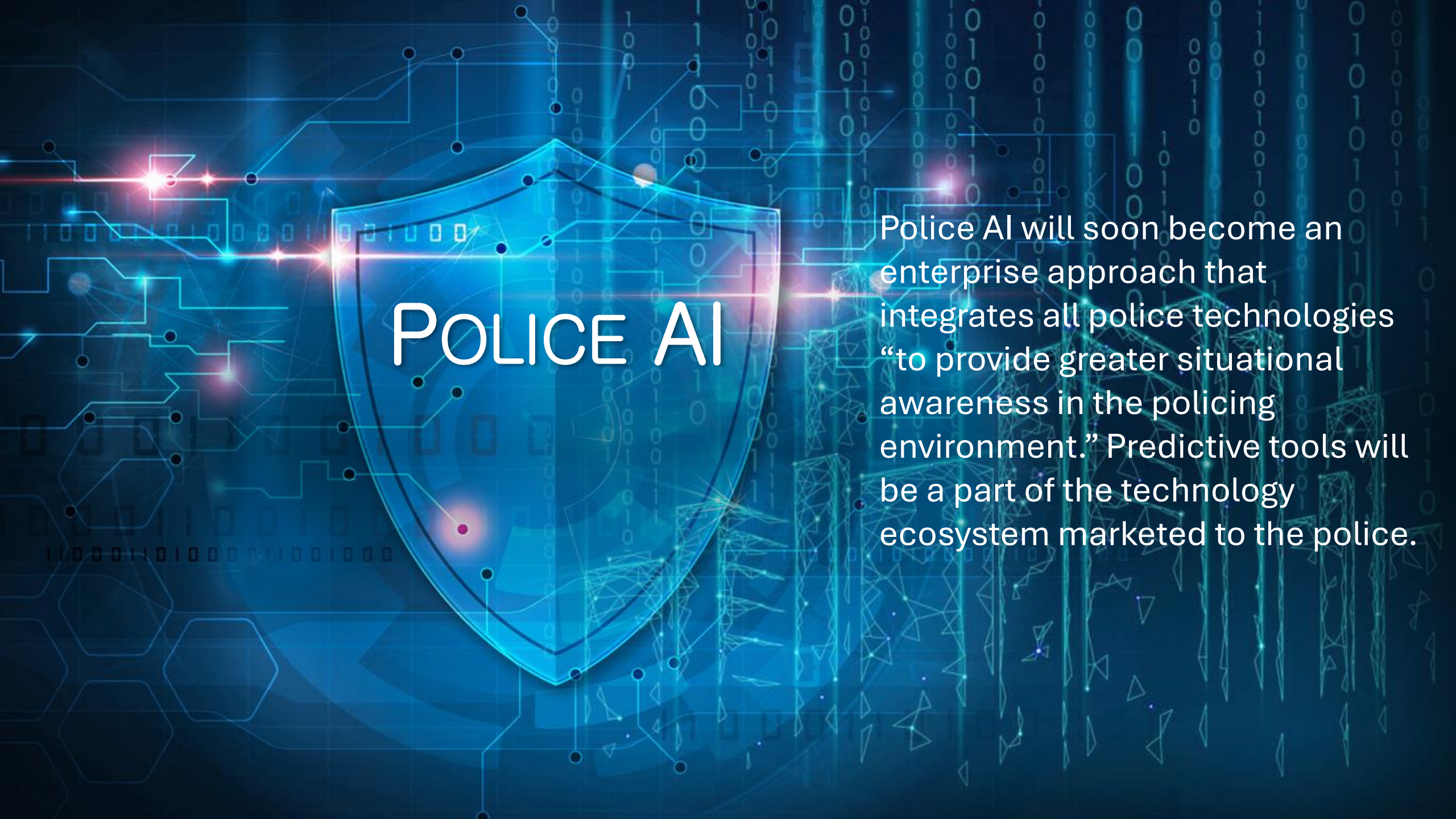
Will legislation, regulation, policy development catch-up with the development of AI?

Will the “police-industrial complex” stop pushing the integration of AI into policing?



UBIQUITOUS AI

- Arrival of “AI Age” in 2023 (ChatGPT)
- Democratizing of AI
- Benefits vs. pitfalls
- AI Race underway
- In what field of endeavor is AI not developing?
- We are rapidly normalizing the use of AI
- AI-centered computers and smartphones will soon be the standard and some form of AI will be hard-baked into most electronics sooner vs later
- The “AI of Everything” or “AI all the time, everywhere, for everyone”



POLICE AI

Police AI will soon become an enterprise approach that integrates all police technologies “to provide greater situational awareness in the policing environment.” Predictive tools will be a part of the technology ecosystem marketed to the police.

POLICE AI

When we can answer the questions regarding policing's use of artificial intelligence, then our questions about predictive policing will become clearer and their answers more definitive



POLICING CULTURE AND AI/PREDICTIVE TECHNOLOGY

CHALLENGES

- High turn over rate of chiefs
- Politics, personnel, budgets
- Pressure to solve crime (differently)
- Disconnected community relationships
- Staffing crisis
- Lack of training re: tech
- Lack of understanding of advanced tech
- Cultural bias for action
- Reliance on vendors for tech knowledge
- Lack of national coherence re: AI policy/ethics
- Unintended consequences

INFLUENCES

- Exponential rate of AI development
- Politics
- Solutions presented by vendors
- High turn over rate of chiefs
- Political/community pressure to solve crime (differently?)
- Cultural bias for action
- Reliance on vendors
- Lack of national coherence
- National Polarization
- Unintended consequences

Community Expectations of Policing

Communities get the kind of policing they accept or demand. But what happens when they don't know the questions they should ask the police?



GOVERNMENT'S ROLE IN POLICE AI

- All levels of government have a role to play
- Legislation/regulation
- Policy guidance
- Funding
- Develop tools for ethical adoption of AI
- Knowledge management
 - convenings
 - research/publications
 - guidebooks
 - webinars
 - knowledge base
- Vendor oversight
- Etc.

TOM CRUISE

A STEVEN SPIELBERG FILM

MINORITY REPORT

TWENTIETH CENTURY FOX AND DREAMWORKS PICTURES PRESENT A CRUISE/WAGNER /
BLUE TULIP/ RONALD SHUSETT/ GARY GOLDMAN PRODUCTION A STEVEN SPIELBERG FILM
TOM CRUISE "MINORITY REPORT" COLIN FARRELL SAMANTHA MORTON
AND MAX VON SYDOW MUSIC BY JOHN WILLIAMS COSTUME DESIGNER INDUSTRIAL LIGHT & MAGIC
EDITED BY DEBORAH L. SCOTT EXECUTIVE PRODUCERS MICHAEL KAHN, A.C.E. PRODUCED BY ALEX MCDOWELL
PRODUCED BY JANUSZ KAMINSKI, ASC EXECUTIVE PRODUCERS GARY GOLDMAN RONALD SHUSETT
DIRECTOR OF PHOTOGRAPHY GERALD R. MOLEN EXECUTIVE PRODUCERS BONNIE CURTIS WALTER F. PARKES JAN DE BONT
SCREENPLAY BY PHILIP K. DICK BASED UPON THE NOVEL BY SCOTT FRANK AND JON COHEN DIRECTED BY STEVEN SPIELBERG

DREAMWORKS PICTURES PRESENTS A STEVEN SPIELBERG FILM

EVERYBODY RUNS JUNE 21

- Science fiction is a creative way to think about the future (e.g. Star Trek “communicators” and today’s smartphones, “Phasers” and today’s tasers, etc.)
- 2002 movie set in 2054
- Tom Cruise starred as Chief John Anderton, Department of Precrime
- The three Human “Precogs” are analogous to predictive tools/AI of our near future
- The Department of Precrime had a virtuous goal – the prevention of all murders – and it appeared to be working
- The “data” indicating who will commit a murder was supposed to be a unanimous Precog determination
- A “minority report” was the alternative future report by one of the Precogs that was concealed by the for-profit organization “Department of Precrime”
- All was good until the Precogs foresaw Tom Cruise committing a murder – and we learn how the “never wrong” predictions can, in fact, be wrong

ACTIONS WE SHOULD TAKE

Increasing our knowledge and providing Guidance

Model Policies

Future Policing Institute
Center for Policing and Artificial Intelligence

A Model Policy for the use of
Generative Artificial Intelligence by Police Agencies

Policy/General Order: Departmental use of Generative Artificial Intelligence (AI) Algorithms

1. Purpose

The purpose of this policy is to establish guidelines for the use of Generative Artificial Intelligence (GAI) tools, like Large Language Model artificial intelligence algorithms, within the Police Department. AI tools can have significant benefits to the department in terms of effectiveness and efficiency. However, there are also concerns surrounding this rapidly evolving technology. By issuing this policy, it is the intent of the department to ensure that AI is used responsibly, ethically, and effectively by all members of this department.

GAI technologies are advancing at an exponential rate. Generally, the criminal justice system's policies, practices, regulations, legislation, and case law have not kept pace with AI's rapid evolution. As a result, the department is taking a responsible and measured approach to the implementation of AI. As the utility and challenges of GAI technologies become clearer, our guidelines will undoubtedly change to clarify the authorized uses and restrictions of this powerful technology.

2. Applicability and responsibility

This policy applies to all sworn officers, civilian personnel, volunteers, and other members of the department. It is the responsibility of all department members who interact with AI technologies in the performance of their official duties to be aware of, and adhere to, the guidelines set forth in this policy.

3. Definitions

- Artificial Intelligence (AI):** Artificial intelligence (AI) refers to the simulation of human intelligence processes by machines, typically through the use of algorithms to automate tasks by rapidly processing and analyzing large amounts of data, and then present the results from this analysis in such a way that would typically require human intelligence.
- Generative Artificial Intelligence (GAI):** This refers to a broad set of technologies that use machine learning techniques to generate content in response to user inputs. They can generate text, still images, video, speech, and music.
- Large Language Models (LLM):** LLMs are a subset of GAI. They are advanced natural language processing models powered by AI. They are designed to generate human-like text responses, images, speech, or music based on the input they receive. Examples of

Executive Orders

Executive Order on the Safe, Secure, and Trustworthy Development and Use of Artificial Intelligence

By the authority vested in me as President by the Constitution and the laws of the United States of America, it is hereby ordered as follows:

Section 1. Purpose. Artificial intelligence (AI) holds extraordinary potential for both promise and peril. Responsible AI use has the potential to help solve urgent challenges while making our world more prosperous, productive, innovative, and secure. At the same time, irresponsible use could exacerbate societal harms such as fraud, discrimination, bias, and disinformation; displace and disempower workers; stifle competition; and pose risks to national security. Harnessing AI for good and realizing its

Guiding Principles for
the Safe and
Responsible use of AI

Science and
Publications

USING ARTIFICIAL INTELLIGENCE TO ADDRESS CRIMINAL JUSTICE NEEDS

BY CHRISTOPHER RIGANO
NJ is committed to realizing the full potential of artificial intelligence to promote public safety and reduce crime.



"Intelligent machines" have long been the subject of science fiction. However, we now live in an era in which artificial intelligence (AI) is a reality, and it is having very real and deep impacts on our daily lives. From phones to cars to finances and medical care, AI is shifting the way we live.

AI applications can be found in many aspects of our lives, from agriculture to industry, communications, education, finance, government, service, manufacturing, medicine, and transportation. Even public safety and criminal justice are benefiting from AI. For example, traffic safety systems identify violations and enforce the rules of the road, and crime forecasts allow for more efficient allocation of policing resources. AI is also helping to identify the potential for an individual under criminal justice supervision to reoffend.¹

Research supported by NJU is helping to lead the way in applying AI to address criminal justice needs, such as identifying individuals and their actions in videos relating to criminal activity or public safety, DNA analysis, gunshot detection, and crime forecasting.

What is Artificial Intelligence?

AI is a rapidly advancing field of computer science. In the mid-1950s, John McCarthy, who has been credited as the father of AI, defined it as "the science and engineering of making intelligent machines" (see sidebar, "A Brief History of Artificial Intelligence").² Conceptually, AI is the ability of a machine to perceive and respond to its environment independently and perform tasks that would typically require human intelligence and decision-making processes, but without direct human intervention.

AI

ARTIFICIAL INTELLIGENCE OUR GUIDING PRINCIPLES

These are the principles we follow as we harness the power of AI to enhance the safety of our community

BE RESPONSIBLE AND EFFECTIVE

We will be good stewards of the public investment in policing and will ensure the AI we use is effective in advancing community safety

BE TRANSPARENT AND ACCOUNTABLE

We will provide the community with a full accounting of our use of AI to control crime and hold ourselves accountable for using it in ways that avoid harm

BE COLLABORATIVE AND RESPONSIVE

We will co-produce the decisions to use AI with the community and empathetically respond to community concerns about the technology

BE EQUITABLE AND JUST

We will do everything in our power to ensure our policies and practices around the use of AI are both equitable and just to all members of the community we have sworn to protect

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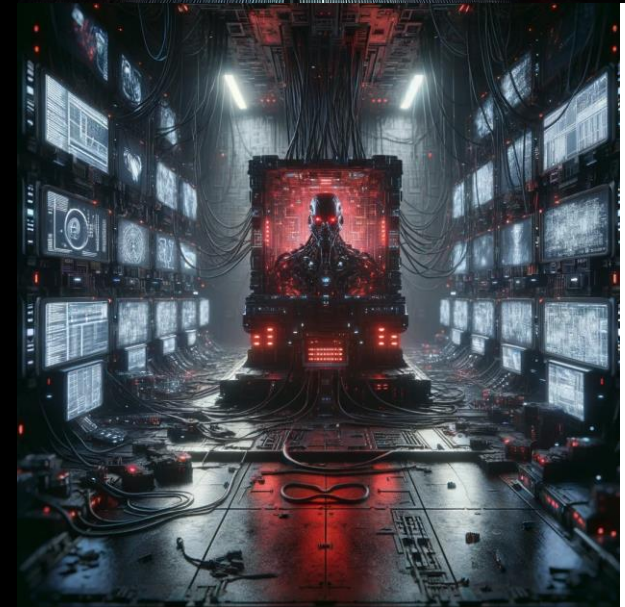
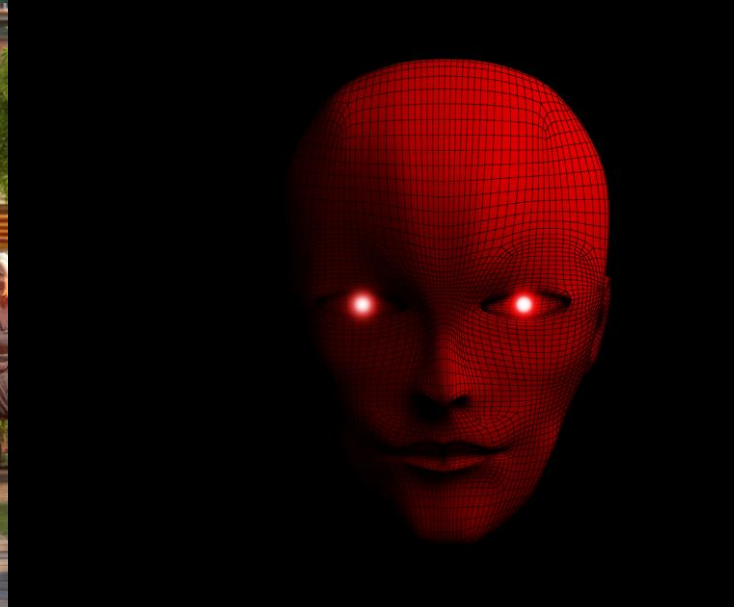
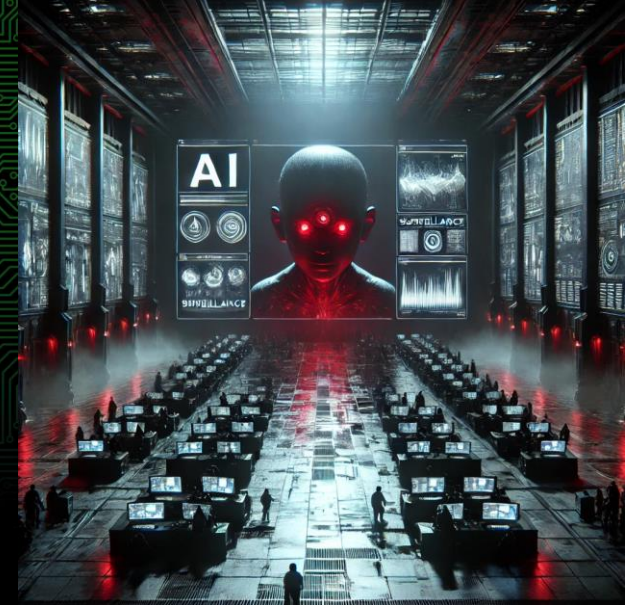
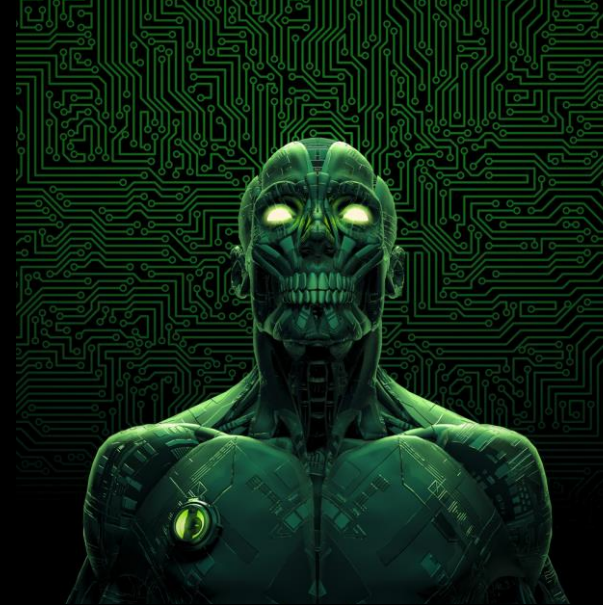
For more information on our policies regarding the use of AI scan this QR code



ACTIONS WE MUST TAKE

- ✓ Increasing and share our knowledge about AI
- ✓ Involve the community in developing crime control outcomes
- ✓ Involve the community in AI acquisition and use decisions
- ✓ Adopt a national coherence around the Guiding Principles for the Safe and Responsible Use of Police AI
- ✓ Encourage the police to be effective, empathetic and just in controlling crime and the safe and responsible use of AI





What version of AI do we want?



Policing's Future Uncertainty

A Chinese farmer worked his farm with his son and their horse.

When the horse ran away, neighbors considered it unfortunate, but the farmer responded, "Maybe yes, maybe no."

The horse returned with wild horses, which neighbors saw as good luck, but the farmer remained neutral, saying, "Maybe yes, maybe no."

The farmer's son broke his leg while taming a wild horse, causing neighbors to express sympathy, but the farmer again replied, "Maybe yes, maybe no."

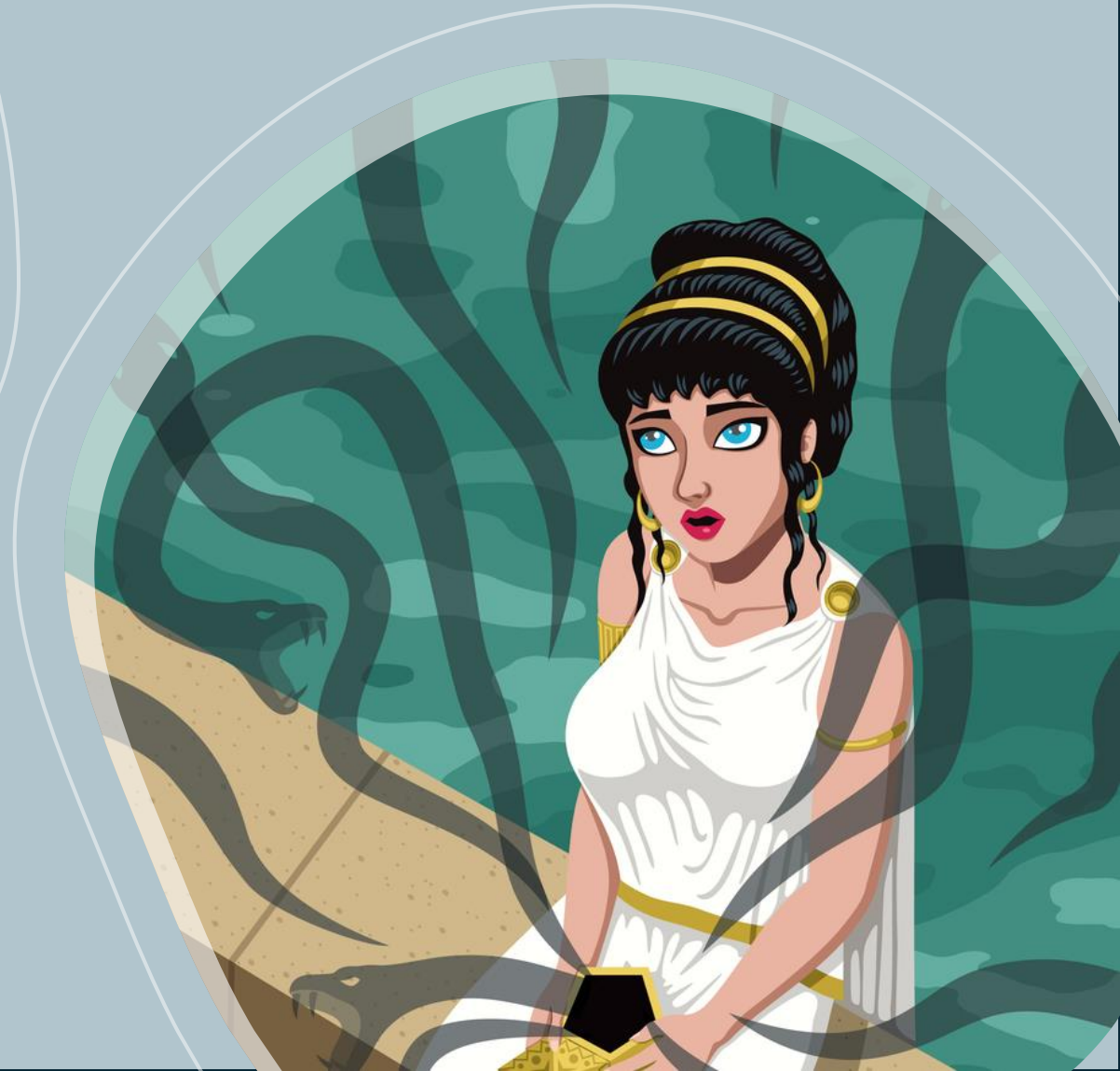
An army drafted all young men in the village, but the farmer's son was spared due to his injury, which neighbors viewed as fortunate. The farmer maintained his stance, saying, "Maybe yes, maybe no."

We have the ability to affect the future of Police AI. We don't have to leave it to random occurrences or outside influences (like the tech industry).

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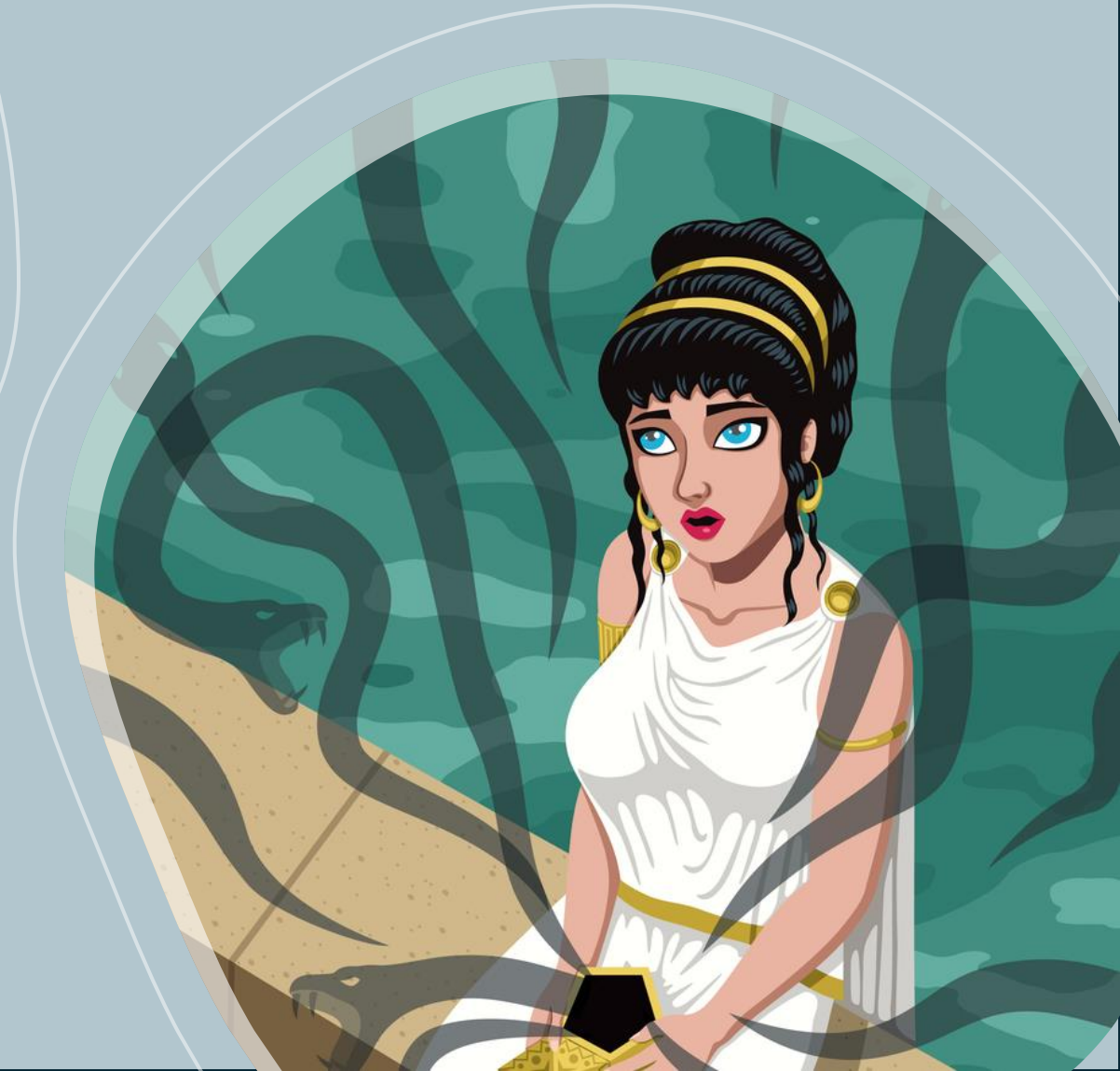


Is police AI a good thing or a bad thing?
Maybe yes, maybe no.





It all depends... on us!





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